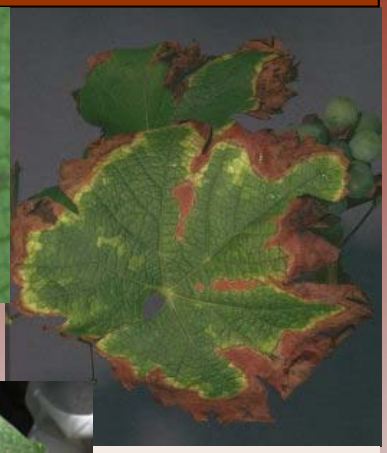
LEAFHOPPERS—*CICADELLIDAE*

POTATO LEAFHOPPER (Empoasca fabae)

Vine Leafhopper Adult



'Hopper Burn' -Vine Leafhopper damage to grapevine leaves

Leafhopper feeding damage symptoms on upper surface of leaf

Leafhoppers on citrus in Laghman

LEAFHOPPERS

Description

There are many species of leafhopper attacking several crops in Afghanistan. Direct damage by feeding with piercing and sucking mouths can be serious, but some species also spread viruses. In most cases, photosynthesis is reduced, but some leafhoppers inject toxins causing severe distortion or death of leaves. On table grapes, fruit quality may be affected by sooty mould.

Leafhoppers usually overwinter as adults and in spring, eggs are laid in veins on the underside of the leaves. There are several generations through the summer.

Leafhoppers look similar to aphids, but are easily distinguished by their rapid movements and jumping. Often live hoppers move so fast that they are difficult to find, but the dead skins of larvae stuck to the underside of the leaf are a sign.

The potato leafhopper feeds on citrus fruit by puncturing rind cells, causing yellowish to light brown, roundish scars on fruit.

Monitoring

Species of leafhopper should be identified and nymphs be counted. For grapes, the threshold varies during the season, but generally treatment is necessary if there are more than 10 nymphs per leaf.

There is no threshold for leafhopper on citrus and other crops.

Control

There are many natural enemies of leafhoppers, especially egg parasites, but in grapes, these natural enemies are killed by sulphur sprays.

In citrus, summer oil sprays are effective. In most crops the following pesticides are recommended: imidacloprid, acetamiprid, buprofezin.